PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
PCT075		
International application No. PCT/IT 02/00503	International filing date *(day/month/year)* 30.07.2002	Priority date *(day/month/year)* 30.07.2002
International Patent Classification (IPC) or both national classification and IPC F16M11/32		
Applicant LINO MANFROTTO + CO. S.p.A. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

   ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the opinion
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
13.02.2004	28.10.2004
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Rochus, J Telephone No. +49 89 2399-8913

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/IT 02/00503

I. Basis of the report

1. With regard to the **elements** of the international application *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*:

Description, Pages

1-5	as originally filed

Claims, Numbers

9-16	as originally filed
1-8	filed with telefax on 06.09.2004

Drawings, Sheets

1/3-3/3	as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   - ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
   - ☐ the language of publication of the international application (under Rule 48.3(b)).
   - ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   - ☐ contained in the international application in written form.
   - ☐ filed together with the international application in computer readable form.
   - ☐ furnished subsequently to this Authority in written form.
   - ☐ furnished subsequently to this Authority in computer readable form.
   - ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
   - ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

   - ☐ the description, pages:
   - ☐ the claims, Nos.:
   - ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

   (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-16
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-16
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-16
	No:	Claims	

2. Citations and explanations

see separate sheet

1. Claim 1 describes a tripod comprising a spider with a through-hole, and a pillar with a stem slidably housed within the through-hole and with a head being connected to a first end of the pillar, as known from EP 1 122 486.

   To provide a less bulky arrangement, the head is at least partially housed inside the through-hole when the tripod is in the closed-up condition, i.e. the most compact condition.

   This is novel and industrial applicable and contains an inventive step as none of the cited documents discloses a slidable stem with a head able to be housed within the through-hole of the spider, and thus could give a suggestion to solve the inherent problem.

2. The dependent claims 2 - 16 include advantageous embodiments of the tripod according to claim 1 and thus also fulfil the requirements raised.

3. Fig. 3 is so big that it does not fit completely on sheet 3/3 of the drawings (Rule 11(6) PCT).

Claims

1. A tripod (1) for supporting apparatus in general and, in particular, for optical or photographic apparatus and the like, comprising a spider (2), a pillar (8) arranged to be housed slidably with a stem (7) thereof in a through-hole (6) formed through the spider (2), and a head (4) arranged for receiving the apparatus, the head (4) being connected to a first end (7a) of the pillar (8), characterized in that, in the closed-up condition, that is, in the most compact condition of the tripod (1), the head (4) is at least partially housed inside the through-hole (6).

2. A tripod according to Claim 1, comprising means for adjusting the orientation of the head (4), the adjustment means being fixed to a second end (7b) of the stem (7), axially remote from the first end (7a).

3. A tripod according to Claim 1 or Claim 2 in which the head comprises a spherical element (15) and a collet (19) housed inside the stem (7) in the region of the first end (7a), the collet (19) being active on the spherical element (15) in order to clamp it selectively, relative to the stem.

4. A tripod according to Claim 3 in which the head (4) comprises a ring nut (17) mounted on the spherical element (15) and such that, when the tripod (1) is in the closed-up condition, the ring nut (17) is in abutment with the spider (2) and the spherical element (15) is housed inside the hole (6).

5. A tripod according to Claim 3 or Claim 4, comprising a sleeve (21) with a frustoconical opening (22), driven into the first end (7a) of the stem (7), the collet (19) being housed inside the sleeve (21) and cooperating with the frustoconical opening for the clamping of the spherical element.

6. A tripod according to one or more of Claims 3 to 5 in which the means for adjusting the orientation of the head (4) comprise a tie rod (23) associated, by means of a first (23a) of its ends, with the collet (19) in order, when tensioned, to lock the relative rotation of the spherical element (15) inside the collet (19).

7. A tripod according to Claim 6 in which the means for adjusting the orientation of the head (4) comprise a knob (27) in abutment with the second end (7b) of the stem (7), the tie rod (23) being disposed inside the stem (7) and being connected, by means of a second (23b) of its ends, to the knob (27), for the adjustment of the tensioning of the tie rod (23).

8. A tripod according to Claim 7 in which the knob (27) comprises a female thread (30) in which the second threaded end (23b) of the tie rod (23) is engaged by screwing, so that rotation of the knob (27) varies the tensioning of the tie rod (23) and consequently the clamping of the collet (19) onto the head (4).